

METHODS FOR PRODUCTION OF ARRAYS WITH MODIFIED
OLIGONUCLEOTIDE AND POLYNUCLEOTIDE COMPOSITIONS

ABSTRACT OF THE DISCLOSURE

5 The present invention provides methods for producing arrays having associated modified
nucleic acid structures, e.g. acid stable and/or end-blocked nucleic acids such as 2'-O-R
oligonucleotides. In one embodiment, arrays produced using the methods of the invention exhibit
an increased binding affinity with complementary nucleic acids, and in particular with
complementary RNA. In another embodiment, the associated nucleic acids of the array produced
10 using the methods of the invention exhibit substantial acid resistance, allowing the arrays to be
treated with low pH solutions. In another embodiment, the modified associated nucleic acids of
the array produced using the methods of the invention exhibit substantial resistance to nuclease
degradation.

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